U.S. Fish and Wildlife Service Anadromous Fish Restoration Program Notice of Availability of Federal Assistance 2011 Request for Proposals

March 31, 2011

Program Overview Information

Federal Agency Name:

U.S. Fish and Wildlife Service (USFWS) U.S. Department of the Interior Anadromous Fish Restoration Program

Funding Opportunity Title: Cow Creek Watershed Anadromous Fish Passage Assessment and Prioritization for Remediation Project

Announcement Type:

Initial Announcement

Funding Opportunity Number:

AFRP-N11-02

Catalog of Federal Domestic Assistance number (CFDA): 15.648

Dates:

Application Deadline: Electronic copy applications must be received by Grants.gov by the close of business (COB) on April 27, 2011 (4:30 p.m. Pacific Standard Time). Please ensure you use a compatible version of Adobe Reader in submitting your application. Grants.gov has an Adobe versioning test to determine if your version is compatible. Proposals received after the date and time will not be considered for funding.

I. FUNDING OPPORTUNITY DESCRIPTION

A. LEGISLATIVE AUTHORITY AND BACKGROUND

1. The Central Valley Project Improvement Act (CVPIA; Title 34 of Public Law 102-575, Section 3406(b)(1)), authorizes and directs the Secretary of the Department of the Interior (DOI), in consultation with other State and Federal agencies, Indian tribes, and affected interests, to develop and implement a program which makes all reasonable efforts to at least double natural production of anadromous fish in Central Valley rivers and streams. Further, the CVPIA requires that this program give first

priority to measures which protect and restore natural channel and riparian habitat values through habitat restoration actions, modifications to Central Valley Project operations, and implementation of the supporting measures mandated by the *CVPIA*. The DOI, is approaching implementation of this directive through development of an *Anadromous Fish Restoration Program (AFRP)*. The species and races of anadromous fish addressed by the *AFRP* include fall-run, late-fall-run, winter-run, and spring-run Chinook salmon; steelhead; striped bass; American shad; white sturgeon; and green sturgeon.

2. The USFWS and Bureau of Reclamation (Bureau) are the DOI agencies responsible for implementing the CVPIA. They are jointly and cooperatively implementing the CVPIA, with the Service assuming lead responsibility for the AFRP. The CVPIA also establishes a Restoration Fund of up to \$50 million annually to assist in implementation of the fish and wildlife restoration provisions. Of this sum, DOI allocates \$3 to \$12 million annually to the AFRP. The AFRP then leverages these funds with other funds provided by partners in restoration projects totaling \$12 to \$20 million annually.

B. PURPOSES AND FUNDING PRIORITIES

The purpose for the AFRP can be found in the Final Restoration Plan http://www.fws.gov/stockton/afrp/restplan_final.cfm and other program documents for the AFRP (USFWS 2001). These objectives are:

- 1. Improve habitat for all life stages of anadromous fish through provision of flows of suitable quality, quantity, and timing, and improved physical habitat;
- 2. Improve survival rates by reducing or eliminating entrainment of juveniles at diversions:
- 3. Improve the opportunity for adult fish to reach their spawning habitats in a timely manner:
- 4. Collect fish population, health, and habitat data to facilitate evaluation of restoration actions;
- 5. Integrate habitat restoration efforts with harvest and hatchery management; and involve partners in the implementation and evaluation of restoration actions.

These objectives are addressed through implementation of projects associated with prioritized actions and evaluations in the Final Restoration Plan for the AFRP. The plan may be viewed at: http://www.fws.gov/stockton/afrp/restplan_final.cfm

Funding priorities are based upon the magnitude of the contribution of the restoration project to doubling natural production, the status of target species and races, and on Section 3406(b)(1)(A) of the CVPIA, which directs the AFRP to give first priority to: 1) measures which protect and restore natural channel and riparian habitat values through restoration actions; 2) modification to Central Valley Project operations; and 3) implementation of the supporting measures mandated by subsection 3406(b) of the CVPIA. http://www.fws.gov/stockton/afrp/restplan_final.cfm

C. PROJECT

Funding is available through the USFWS AFRP to complete the Cow Creek Watershed Anadromous Fish Passage Assessment and Prioritization for Remediation Project. The funded project will include anadromous fish passage barrier and condition mapping, classification, and developing restoration priorities in the Cow Creek watershed in northern California. Cow Creek is a tributary to the Upper Sacramento River near Millville, CA, in Shasta County. A map of the project area is attached at the end of this document.

In addition to inventorying barriers, this project will locate and catalog diversions by type and identify anadromous fish passage and screen improvement opportunities for diversions in the watershed below natural barriers.

D. SCOPE OF WORK

1. Background:

In the final restoration Plan for the Anadromous Fish Restoration Program, four actions were identified for the restoration of anadromous fish in Cow Creek. Two of these actions include screen all diversions to protect all life history stages of anadromous fish, and improve passage at agricultural diversion dams.

Cow Creek is the first major eastside watershed to the Sacramento River below Keswick and Shasta Dams in Shasta County. It covers 275,000 acres and has five major tributaries: North (Little) Cow, Oak Run, Clover Creek, Old Cow, and South Cow. Water rights in the Cow Creek Watershed are either appropriated or riparian. Water rights on North Cow Creek, Oak Run Creek, Clover Creek, Old Cow Creek, South Cow Creek and Lower Cow Creek and the Upper Tributary Areas of the Cow Creek System were determined by the Shasta County Superior Court and are set forth in separate decrees:

North Cow Creek Judgment and Decree 5804 dated April 29, 1932

Oak Run Creek Judgment and Decree 5701 dated July 22, 1932

Clover creek Judgment and Decree 6904 dated October 4, 1937

Cow Creek system, including Old Cow Creek, South Cow Creek, Lower Cow Creek and the upper tributary areasof the Cow Creek system Decree 38577 dated August 25, 1969.

The State Water Rights Board examined the creek system from December 1963 to February 1965 and mapped all the diversions and irrigated lands. The findings are presented in a report "Water Supply and Use of Water on Cow Creek Stream System" dated May 1965 (SHN 2001). Diversion maps are also located in the Cow Creek

Watershed Assessment (SHN 2001). Natural anadromous fish passage barriers have been identified; however no assessments have been done to validate the barriers. At least one barrier classification has been changed from complete barrier to partial barrier. Only one barrier, Clover Creek Falls, is a verified barrier. The natural "barriers" are identified and mapped in the Cow Creek Watershed Assessment (SHN 2001).

2. Goal of Project:

The goal of this project is to identify, classify, and map anadromous fish passage barriers within the Cow Creek Watershed. In addition, this project is to prioritize anthropogenic barriers for remediation and identify diversion screening needs.

3. Study Objectives:

The study objective is to inventory, classify, map, and prioritize for remediation all potential juvenile and adult salmonid passage issues within anadromous fish range in the Cow Creek Watershed. To create a database and GIS layers for agencies and stakeholders to use in addressing passage and screening issues related to man-made barriers and diversions.

4. General Methods:

The applicant is responsible for determining how they will assess the barriers however the analyses/protocols of Powers and Orsborn (1985) and the Washington Department of Fish and Wildlife (2009) are highly encouraged. Any road crossing barrier analyses should use the Third Edition, Volume II, Part IX of the California Salmonid Stream Habitat Restoration Manual (Manual). The USDA Forest Service Aquatic Organism Passage, FishXing website has references on juvenile fish swimming abilities that should be considered.

Barriers are to be classified by species, age class, and flow. Three anadromous salmonid species use Cow Creek, fall run Chinook salmon, late-fall run Chinook salmon, and steelhead. Potential barrier types that may be encountered could include diversion dams, natural falls, subterranean flow, chutes, cascades, and road crossings. Any diversions or pumps are to be assessed in regards to meeting screening criteria as developed by CDFG and NMFS as described in Appendix S, December 2002 and May 2010 editions of the Manual.

Since it is required to determine at what flows features may be barriers, more than one visit may be necessary. A total barrier is a feature that no species or age class can pass at any flow. Partial barriers are to be classified as to what species and lifestage, and at what flow(s).

Analyzing the natural barriers currently identified early in the process will assist in determining the range of anadromy and thus assist in determining the extent of surveys.

As stated above, Clover Creek Falls does not need to be analyzed as it is already known to be a total barrier.

The successful Applicant will perform project management, which includes working with the USFWS, CDFG, the National Marine Fisheries Service, (NMFS), the Cow Creek Watershed Management Group, affected landowners, and the water users; a subset of which will comprise a Technical Advisory Committee (TAC).

Access to the project area and permission for inventory/verification must be obtained in writing, although this is not necessarily required prior to submitting a proposal. The majority of the area in the project area is privately owned by a large number of private landowners and requires permission for access.

II. AWARD INFORMATION

The Red Bluff Fish and Wildlife Office, Anadromous Fish Restoration Program is soliciting proposals to complete the **Cow Creek Watershed Anadromous Fish Passage Assessment and Prioritization for Remediation Project.** The AFRP anticipates up to \$200,000 may be available for funding this project. Successful awards will be made through a grant.

Anticipated project start date should be initiated as early as possible (late in the fiscal year 2011), given the timeline to prepare for collecting existing data, contacting landowners, gathering additional field data, and developing database/maps. The Project must be completed within three years upon signing the grant agreement.

III. Eligibility Information

A. Eligible Applicants

- * Eligible applicants are limited to those institutions, organizations or individuals with a background in fish passage and fish screen analyses, and GIS map and database creation/management.
- * Applications from federal agencies or employees of federal agencies cannot be considered.
- * The applicant shall be fully capable, qualified, insured, and licensed as required to provide these services.

Please also list all offices used by the respondent and the location of the office from which the primary work on this project would be performed.

B. Cost Sharing or Matching

There is no cost-sharing or matching requirement for this award.

IV. Application and Submission Information

A. This Announcement Contains All the Information Required to Submit an Application

1. Electronic Applications Materials

The required Standard Form (SF) 424 form set may be accessed at http://www.grants.gov or by contacting Brenda Olson at Brenda_Olson@fws.gov for any other of the required forms as listed in the grant solicitation or in 2) Supplemental Requirements as listed below.

Grants.gov supports the Adobe Reader versions 8.1.1, 8.1.2, 8.1.3, 8.1.4, 8.1.5, 8.1.6, 8.1.7, 9.0, 9.1, 9.1.1, 9.1.2, 9.2, 9.3.2, and 9.4. Some of these versions are available for free download from the Adobe Website: http://www.adobe.com/products/acrobat/readstep2.html.

Only these versions should be used when submitting grant applications. Other Adobe Reader versions are not supported. Assistance is available on Grants.gov in determining compatible versions of Adobe Reader under Help, Download Software.

2. Hard Copy Application Materials

If you do not have access to the web page or have trouble downloading material, and you would like a hard copy you may mail the request to Brenda Olson at RBFWO 10950 Tyler Rd, Red Bluff, CA 96080 or call (530) 527-3043 x 227. When calling the RBFWO, please indicate that you are requesting the RFP and associated application forms for AFRP-N11-02, Cow Creek Watershed Fish Passage Assessment and Prioritization for Remediation Project. Materials may also be requested via Internet by sending an e-mail to Brenda_Olson@fws.gov. For all technical questions, call Brenda Olson at (530) 527-3043 x227.

B. Content and Form of Application Submission

1. Application Requirements

This announcement contains all the information needed to submit a proposal. The project proposal is a narrative description and the budgetary information of the project. Only information that is pertinent to the project should be included. The project proposal should also indicate whether partial funding of the project is practicable, and, if so, what specific portion(s) of the project could be implemented with what level of funding.

A project proposal that is part of a longer term initiative will be considered, however, the proposed project's objectives, benefits, and tasks must stand on their own, as there are no assurances that additional funding would be awarded in subsequent years for associated or complementary projects. An incomplete proposal will not be considered for funding.

Applications <u>must be</u> no smaller than 12 point font, preferably in Times New Roman type, with 1-inch margins, double-spaced, no longer than 20 pages and submitted in single-sided, electronic or hard copy.

Complete applications must include:

- Applicant name, mailing address, phone and fax number, and email address
- Budgetary information (including necessary Federal Forms, i.e. SF-424 Application for Assistance)
- Background and need for proposed work
- Justification for proposed work
- Approach including study design, hypotheses, goals, methods, equipment and facilities, data collection, any statistical analysis and quality assurance procedures, tasks
- Feasibility of the described approach, any contingencies or requirements (e.g., dependence on outcome of other projects, environmental compliance or permitting)
- Performance measures related to project goals and objectives
- Data handling and storage
- Expected products and outcomes
- Deliverables for each task
- Work schedule, including estimated start and completion dates of each task
- Applicant qualifications and experience. In addition, the applicant must provide a
 list between one to three projects completed by the firm that demonstrates the
 applicant's competence to perform work similar to that which si likely to be
 required on this project.

The Applicant shall name a project manager for these services who will coordinate all activities with the USFWS and the TAC selected for this Project.

2. Supplemental Requirements

The following table provides a summary of the supplemental forms and requirements that must be included in the application. The Dun & Bradstreet (DUNS number), Central Contractor Registration (CCR), and electronic funds transfer actions are a requirement. Potential applicants must complete these requirements before the award can be made.

What's required	Available at:	When to
		submit

Application	http://www.whitehouse.gov/omb/grants/grants_forms.html	By April
for Federal	http://www.gsa.gov/forms	27, 2011
Assistance,	http://www.fedforms.gov	
Standard		
Form SF424		
Cover sheet,		
424 A & B for		
Non-		
Construction;		
C & D for		
Construction		
awards		

Dun & Bradstreet Number (DUNS)	www.dnb.com www.dnb.com/US/customer_service/index.html 1-800-234-3867. http://www.dnb.com/us/	Will need before registering with CCR
Registration in the Central Contractor's Registration (CCR)	http://www.CCR.GOV	In time to allow for processing if not already in the system.
Electronic funds transfer Form - ACH 3881	Form is available at the Red Bluff Office of the U.S. Fish and Wildlife Service 530/527-3043 Note: must be completed for funds transfer to occur. If your organization has a history of having received government funds/payments, you do not need to complete this form again.	Only if awarded
Registration Grants.gov *Before applying for a grant opportunity on Grants.gov, an applicant must complete the registration process	http://www.Grants.gov or support@Grants.gov, or you may call the Contact Center at: 1.800.518.4726 Registration is a 3-step process: 1. Register your organization, then; 2. Register yourself as an Authorized Organization Representative (AOR) then; 3. Become authorized by your organization to submit applications Please note: It may take up to two (2) weeks to complete the registration process due to unexpected delays. It is highly recommended that you begin the registration process as soon as possible SEE THE GRANTS.GOV WEBSITE FOR COMPLETE DETAILS	In time to allow for processing if not already in the system.

3. Data Universal Numbering System Number (DUNS)

On June 27, 2003, The Office of Management and Budget (OMB) published a Federal Register notice (68 FR 38402) that announced final policy issuance on the use of a universal identifier by grant applicants. The policy requires applicants applying for Federal grants or cooperative agreements on or after October 1, 2003 to acquire a Data Universal Number System (DUNS) number. It is the responsibility of the organization seeking Federal funds to obtain a DUNS, as necessary. Grant and cooperative

agreement applicants need to ensure they have a DUNS number. Organizations can receive a DUNS number at no cost by calling the dedicated toll-free DUNS number request line at 1-877-753-1444 or on the web at http://smallbusiness.dnb.com/manage

C. Submission Dates and Times Electronic applications must be received by Grants.gov by the close of business on April 27, 2011 (4:30 p.m. Pacific Standard Time). If the proposal cannot be submitted via Grants.gov, it may be submitted to Brenda_Olson@fws.gov by 4:30 pm Pacific Standard Time, April 27, 2011. If the electronic application cannot be submitted, a hard copy must be received by the RBFWO Anadromous Fish Restoration Program (address as above in section IV A. 2.), attention Brenda Olson, by April 27, 2011 (4:30 pm Pacific Standard Time). Hard copy applications should be printed on one side only and should not be bound in any manner. Proposals received after the date and time will not be considered for funding.

D. Intergovernmental Review

This program is not covered by Executive Order 12372. Review process is not required.

E. Funding Restrictions:

Awards will not allow reimbursement of pre-award costs. Funding is contingent upon the RBFWO Anadromous Fish Restoration Program's receipt of an adequate implementation project budget for FY 2011.

V. Application Review and Selection Information A. Criteria

Applications will be considered complete if they include all the information required in sections IV.B.1-3.

Applications are sought that show the applicant's expertise and ability to assess fish passage and screen issues, and create/manage GIS maps and databases.

Proposals will be reviewed by a team of Federal staff based on the following criteria:

- Proposed assessment design and approach in determining fish passage and screen issues, and GIS map and database creation/management. Will the proposed approach succeed in the stated goal?
- Approach is valid and technically sound. Are the proposed deliverables of value?
- Possess experience and qualifications in assessing fish passage and screen criteria, and creating GIS maps and databases,
- Primary Investigators and/or sub-recipients record of performance and expertise,
- Budget is reasonable and provides good value for funds requested, and
- Past performance on projects; working knowledge of fish passage and screen analysis, GIS, and database creation/management.

B. Review and Selection

Additional technical review will be conducted by reviewers external to the Anadromous Fish Restoration Program and unaffiliated with any organization submitting a proposal or proposed subcontractors. Projects selected for funding may require revision based

on internal and/or external review comments. The selection recommendations of the Federal staff (and any external reviewers) will be provided to the RBFWO Project Leader, who is the Selection Official. The Selection Official will make the final award decision. All applicants will be notified of the results of the selection process by the Grants/Agreements Assistant.

C. Applicant's and the USFWS responsibilities

1. Applicant's Responsibilities and Deliverables

Successful applicants shall ensure that the project complies with all applicable Federal, State and local laws and regulations. A successful applicant is ultimately responsible for obtaining all applicable Federal, State and local permits for work to be performed under the award.

The Recipient shall submit a written report on a quarterly (or more frequently) basis presenting the activities that occurred and provide a description of the project accomplishments during each quarter of the calendar year beginning with the quarter covering October through December. The reports shall be submitted within 30 days following the end of each quarter.

The successful applicant will submit requests for reimbursement using Standard Form 270, Request for Reimbursement, no more frequently than monthly. A breakdown of funds spent, by task, must accompany each invoice. Requests for reimbursement will be made on the basis of submission by recipient of acceptable documentation and deliverables as defined by the Service. Ten percent of the total amount of the agreement may be withheld until all requirements of the agreement are accomplished. If 10% is withheld, a final invoice may be submitted for the 10% withheld once all the requirements are approved.

2. USFWS Responsibilities

USFWS will provide a science-based technical review of selected proposal, may provide technical information, and may be available for assisting with products such as peer-reviewed publications.

VI. Award Administration Information

A. Award Notice

Successful applicant will be notified after selection and confirmation of available funding, by August 30, 2011. An applicant should not initiate a project in expectation of USFWS funding, nor should they purchase materials or begin work until such time as they receive the final award document signed by an authorized Service official.

B. Administrative and National Policy Requirements:

Federal awards are subject to Federal financial administrative requirements. Please see the following for a particular application.

Type of Recipient	Applicable Guidance
Institutions of Higher Education	OMB Circular 2 CFR Part 215 OMB Circular A-21, Cost Principles 43 CFR Part 12, Subpart D – Governmentwide Debarment and Suspension (Nonprocurement) And Governmentwide Requirements for a Drug Free Workplace 43 CFR Part 12, Subpart E – Buy American Requirements for Assistance Programs 43 CFR Part 18 – New Restrictions on Lobbying 48 CFR Part 31.2 – Contracts with Commercial Organizations (if work will be subcontracted out) 48 CFR Part 52.215.2 – Audit and Records Negotiation
Non-Profit Organizations	OMB Circular 2 CFR Part 215 OMB Circular A-122 Cost Principles OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations 43 CFR Part 12, Subpart D – Governmentwide Debarment and Suspension (Nonprocurement) And Governmentwide Requirements for a Drug Free Workplace 43 CFR Part 12, Subpart E – Buy American Requirements for Assistance Programs 43 CFR Part 18 – New Restrictions on Lobbying 48 CFR Part 31.2 – Contracts with Commercial Organizations (if work will be subcontracted out) 48 CFR Part 52.215.2 – Audit and Records Negotiation
For profit, individuals and others excluded from coverage with OMB Circular A-122	Federal Acquisition Regulations, full text of appropriate clause may be found at http://www.arnet.gov/far 43 CFR Part 18 – New Restrictions on Lobbying 48 CFR Part 31.2 – Contracts with Commercial Organizations 43 CFR Part 12, Subpart E – Buy American Requirements for Assistance Programs

Governments – State, Local, and	OMB Circular A-102				
Federally	OMB Circular A-87, Cost Principles for State,				
Recognized Indian tribal	Local and Indian Tribal Governments				
governments	OMB Circular A-133, Audits of States, Local				
	Governments, and Non-Profit Organizations				
	43 CFR Part 12, Subpart E – Buy American				
	Requirements for Assistance Programs				
	43 CFR Part 18 – New Restrictions on Lobbying				
	43 CFR Part 12, Subpart D - Governmentwide				
	Debarment and Suspension (Nonprocurement)				
	And Governmentwide Requirements for a Drug				
	Free Workplace				
	48 CFR Part 52.215.2 – Audit and Records				
	Negotiation				

C. Reporting Requirements

1. Performance and Financial Reports

The successful applicant shall submit an annual interim written performance report to the project contact listed in VII no later than October 1 in Adobe PDF or Microsoft Word. The report's format must present the activities that occurred and provide a description of the project accomplishments during the calendar year. The Financial Report must use the Standard Form 425 Federal Financial Report. The reports shall be submitted within 90 days after the last day of each annual interim reporting period. Please see the following schedule for due dates of both the Performance and Financial Reports:

Award Effective Date	Annual Interim Report End Date	Annual Interim Report <i>Due</i> Date			
		(90 days after report end date)			
January 1	December 31	March 31			
January 2 – March 31	March 31	June 29			
April 1	March 31	June 29			
April 2 – June 30	June 30	September 28			
July 1	June 30	September 28			
July 2 – September 30	September 30	December 29			
October 1	September 30	December 29			
October 2 – December 31	December 31	March 31			

The successful applicant shall also submit written progress reports to the project contact listed in VII on a quarterly basis in Adobe PDF or Microsoft Word format presenting the activities that occurred and provide a description of the project accomplishments during each quarter of the calendar year beginning with the quarter immediately succeeding the project start date. The reports shall be submitted within 30 days following the end of each quarter.

2. Final reports

Draft final reports are due no later than 60 days after completion of the project. Final reports will be due 30 days after receipt of Service comments on the draft report. The successful applicant shall submit, within 90 calendar days of completion of the project, a final invoice. The successful applicant shall account for any real and personal property acquired with Federal funds or received from the Federal Government according to requirements of regulations referenced in the award. The final report will be provided in hardcopy and electronic copy, using Adobe PDF or Microsoft Word format, and sent to: (Habitat Restoration Coordinator's mailing and e-mail address. See Section VII.).

VII. Agency Contact(s)

For technical questions associated with this project contact **Brenda Olson**, Anadromous Fish Restoration Program Habitat Restoration Coordinator; 10950 Tyler Road; Red Bluff, CA 96080; telephone 530-527-3043; fax 530-529-0292; email:**Brenda_Olson**@fws.gov. For questions of an administrative content such as forms completion and for sending hard copies such as the signature page contact Brenda Olson.

VIII. Other Information

Please note that the Federal Government is not obliged to make any awards as a result of this announcement, and only official Service grant officers can bind the Government to the expenditure of funds. If you are selected as a Federal grant recipient, the funds you receive may be subject to Federal and other taxes.

A. Proposal preparation instructions and format:

In addition to the required forms identified in Section IV, a narrative proposal is also required. The following is the format of the proposal, as well as instructions on how to complete the proposal.

1. Project information page

This proposal (title of proposal) is for the fiscal year 2011:

- 1) name:
- 2) proposal title;
- 3) project duration;
- 4) lead organization name;
- 5) enter the name of the agency or institution to whom funds would be awarded;
- 6) organization contact (please provide information for the primary person responsible for oversight of the project's operation, management, and reporting requirements at the lead institution, social title, first name, last name, street address, city, state or province, ZIP Code or mailing code, telephone (include area code and email);
- 7) lead investigator (is the lead investigator the same as the main contact person? If not please provide information for the primary person responsible for oversight of the award operation, management, and reporting requirements at the lead institution, social title,

first name, last name, street address, city, state or province, ZIP Code or mailing code, telephone number and e-mail); and,

8) provide information about additional investigators (last name, first name, organization).

2. Summary or abstract page

Provide a summary of your project including the following: a brief description of your proposed project, including location, goals, objectives, the actions to be implemented, and the approach to implement the proposal, expected outcomes, and relationship to high priority needs.

3. Proposal description text

- **a. Problem-** describe the problem that the project is designed to address including a brief narrative of the project location. Provide background, including a review of relevant past studies of and solutions (if any) to the problem, here and elsewhere, with appropriate citations of relevant reports. Clearly state the goals, objectives and hypotheses of your proposed study.
- **b. Approach** (scope of work) Provide study design. Describe (if applicable) all sampling, analytical, planning, and construction procedures for each objective as appropriate. Include details about methods and techniques, equipment and facilities, data collection, statistical analysis and quality assurance procedures, performance measures, and describe the criteria to be used in hypothesis testing. Clearly identify how your approach maximizes the information richness and value to decision-makers.
- **c. Feasibility-** Demonstrate that the described approach is both feasible and appropriate to the proposed work, and that the project can be completed in the time allotted, allowing for weather and other exigencies. Any contingencies or requirements (e.g., dependence on outcome or timing of other projects, dependence on natural or operational conditions, environmental compliance and permitting) must be thoroughly addressed.
- **d. Permits and agreements-** If applicable, explain what permits are necessary to proceed with the tasks described. Explain the current status of each permit. Explain any other constraints that could impact the schedule and the ability to implement the project. Identify the nature and approach to resolving other outstanding implementation issues.
- e. Private property access and landowner permission and participation- Projects proposed on private property or that require access of private property owned by someone other than the applicant must provide written permission from the property owner. Projects conducted in the field for which specific locations have not been identified in the proposal will be required to provide access needs and permission for access shortly after notification of approval. Failure to include written permission from the property owner may result in disqualification of the proposal. This is another hard copy item that should be sent, along with other hard copy items (such as the signature

page), to the RBFWO Anadromous Fish Restoration Program contact person (See Section VII, Agency contacts).

- **f. Data handling and storage** describe how the data and other information will be handled, stored, and made accessible.
- **g. Expected products/outcomes** Provide a list of planned deliverables such as; reports, presentations, advances in technology, and information transfers via workshops, seminars, education programs, etc. and timing of each.
- **h. Qualifications.** Provide brief biographical sketches of the principal participants, identifying education and relevant experience as well as contributions (e.g., completed projects, published reports on the same topic) consistent with their roles and responsibilities in the proposed project. Explain how these participants provide the range of expertise in sciences or other disciplines needed to achieve the project's objectives.

Specify individual roles and responsibilities regarding technical, administrative, and project management. When sub-recipients are identified, explain briefly how they were or will be selected and why. Disclose or discuss any potential problems regarding the principal participants' availability to complete their work within the projected timeline.

4. Work Schedule page

Identify the start and completion dates of each of the tasks and associated deliverables discussed above as well as other key milestones. Clearly identify which tasks are considered to be inseparable if only a portion of the project were to be funded. Identify the potential to incrementally fund and implement the proposed scope of work.

Identify how payments would relate to milestones, as applicable. Please identify project management as an independent task. Provide a time line with expected start and stop dates, and accomplishment of milestones.

Tasks identified in the work schedule should match those shown in the budget.

5. Budget

Provide a detailed budget showing how requested funds will be used to carry out the project's scope of work. Costs for each major task described in the "Approach (scope of work)" section of your proposal must be presented. A task for project management should include the specific costs associated with insuring accomplishment of a specific project, such as inspection of work in progress, validation of costs, report preparation, response to project specific questions and necessary costs directly associated with specific project oversight. Applicants should also include costs associated with managing project funds, including preparation of quarterly, annual, and final reports to the funding agency. Tasks for environmental compliance, monitoring, project design,

data handling, storage, and dissemination, and public outreach should also be included as appropriate for your project. Include information related to cost sharing and in-kind contributions.

Suggested Budget Format:

Year 1 (Months 1 to 12)

task	labor	benefits	travel	suppli es and expen dables	services and consultants		lands and rights of way	other direct costs	direct total	indirect costs	total
totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

6. Signature page

If the applicant is unable to submit the proposal via Grants.gov they then must provide a signature page with the following instructions. A one page sheet with an original signature, the sheet may have a scanned-in signature, otherwise it must be followed up with a faxed or mailed copy. This declaration must be submitted to Brenda Olson, Habitat Restoration Coordinator at address 10950 Tyler Road, Red Bluff, CA 96080; telephone 530-527-3043; fax 530-529-0292; email Brenda_Olson@fws.gov, as identified in Section IV.B. Section 2 by April 27, 2011.

This signature page should declare that all representations in this proposal are truthful, and the individual signing the form is authorized to submit the application on behalf of the applicant (if applicant is an entity or organization). Include proposal title and submitter.

Failure to sign and submit this information will result in the application not being considered for funding.

References:

California Department of Fish and Game, 1998, California Salmonid Stream Habitat Restoration Manaual, 3rd Edition.

http://www.dfg.ca.gov/fish/resources/habitatmanual.asp

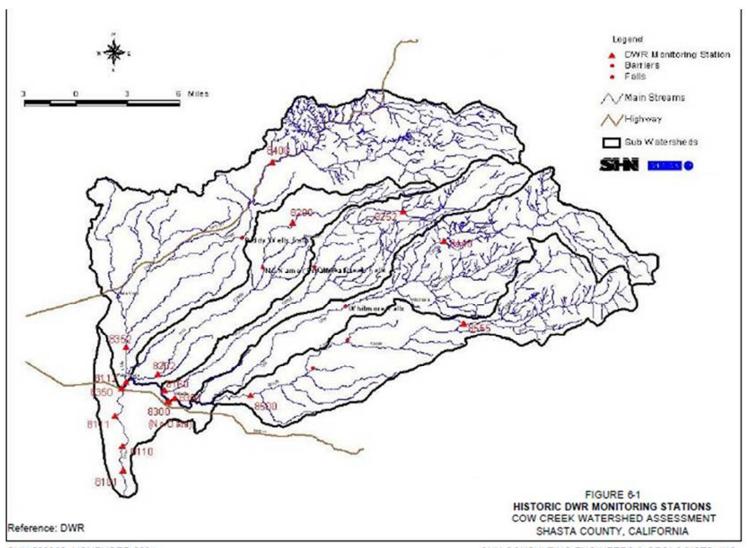
Powers, Patrick, John Orsborn, 1985, "New Concepts in Fish Ladder Design: Analysis of Barriers to Upstream Fish Migration, Volume IV of IV; Investigation of the Physical and Biological Conditions Affecting Fish Passage Success at Culverts and Waterfalls", 1982-1984 Final Report, Project No. 198201400, 134 electronic pages, (BPA Report DOE/BP-36523-1). http://www.osti.gov/energycitations/product.biblio.jsp?osti_id=917018

SHN, 2001, Cow Creek Watershed Assessment.
www.sacriver.org/documents/watershed/cowcreek/assessment/Cow Creek FinalW

atershedAssessment.pdf

U.S.D.A. Forest Service, Aquatic Organism Passage, Fish Xing website http://www.stream.fs.fed.us/fishxing/

Washington Department of Fish and Wildlife, 2009, Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual. http://wdfw.wa.gov/publications/00061/wdfw00061.pdf



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